



Disaster and Emergency Management Resources

Radiological Accidents and Agricultural Producers

Animal Care After a Radiological Accident

- Shelter livestock if advised to do so by authorities.
 - Some farm buildings provide better protection than others because of heavy construction. Placing earth, hay, sacked feed or fertilizer, concrete blocks or other materials around exposed shelter walls will increase effectiveness of shielding.
 - Make sure that adequate ventilation is provided. If you must use a fan, set it on a low speed to avoid bringing in air from the outside.
 - Give adequate space to more valuable animals rather than providing shelter for all animals and risking losses from overcrowding.
 - Natural shelters such as caves, ravines, forests and woodlots offer some protection. Cattle could be penned in cattle underpasses or bridges if available.
 - Cattle confined in pens shelter one another to a limited extent. Move dairy cattle indoors first because radioactive material easily transfers to milk.
- Limit the use of feeds to those under cover or protected from contamination.
 - Grain in permanent indoor storage, hay in a barn, and silage in a covered silo may be considered protected.
 - Rolled bales of hay should be used only when absolutely necessary and only if the outer layers are removed and discarded.
 - Do not let animals graze until you are notified that forage in your area is safe.
 - If grazing cannot be avoided, supplementing it with protected feed will limit ingested contamination.
 - If no stored feed is available, animals can survive on water for a period.
 - Make a special effort to prevent dairy animals from becoming contaminated by providing clean food and water.

- If possible, prevent cattle from drinking from ponds, lakes, rivers, and streams. Spring and well water should be free of contamination. Protect standing water by covering the surface at the outset of an emergency.
- In the event of death or illness of an animal, contact the State Department of Agriculture, your veterinarian, or county Extension agent immediately to assist in diagnosis of the problem.

Recovering Exposed Fruits, Vegetables, and Soils

- Fruit and vegetables may be externally contaminated by radioactive particles.
 - Normal washing of leaves, pods and fruits that have surface contamination is effective in removing the contamination.
 - Washing should be done in a place other than the kitchen to prevent contamination of foods and dishes.
- Underground crops absorb little radiation. Standard washing is sufficient for these foods.
- Most land should be ready for normal agricultural use several weeks after the incident.
 - Officials can monitor and sample your land, advising you when it is appropriate to return to it.
 - If soil is highly contaminated, removal and disposal may be necessary.
 - Planting alternative crops such as cotton or flax instead of food crops may be recommended in some situations.
 - Deep plowing will remove radioactive substances below the plant root level and prevent plants from taking up contaminated substances.

Monitoring Fish

- Fish and marine life in ponds may be harvested unless officials determine they are contaminated.
- Samples of water, fish, and marine life from open bodies of fresh and saltwater should be analyzed for contamination.

Marketing Animals and Products After a Radiological Accident

- A buffer zone, called a Food Control Area, will be established by officials around land that may be contaminated.
- State emergency officials will monitor milk on farms and at points on its way to market.
- You will be notified if sampled milk contains radioactive materials.
- Milk should be safe if it is from dairy animals that have been adequately sheltered and protected. There may be delays in milk pickups, which will require holding milk for longer periods. Be prepared to provide alternate storage, or some milk may have to be discarded.
- Do not destroy animal foods unless storage has made them inedible.
- Livestock that have been exposed to external contamination can be used for food if they have been washed well and monitored by authorities prior to slaughter. Meat animals that have internal contamination cannot be slaughtered until officials advise that it is safe to do so.

Adapted from resource material developed by the University of Wisconsin Extension Service entitled "The Disaster Handbook for Extension Agents"